

Docket 61510
Serial No. 10/776,724

PATENT APPLICATION

AMENDMENTS TO THE CLAIMS

1 1. (currently amended) A ballast testing and monitoring apparatus for quick
2 connection to a fluorescent lamp assembly having a lamp system ballast and at least one
3 fluorescent lamp, said apparatus comprising:

4 a casing having a plurality of light sources spaced apart along a top surface thereof;

5 a test circuit positioned in said casing;

6 a memory electrically connected to said test circuit;

7 means for releasably electrically connecting said test circuit to a primary power source;

8 means for releasably electrically connecting said test circuit to said lamp assembly ballast

9 and to said at least one lamp;

10 means in said test circuit for obtaining startup voltage data from said lamp assembly ballast

11 for evaluation indicative of operability of said lamp assembly ballast; and

12 means in said test circuit for storing a ballast fault record in said memory if said evaluated

13 startup voltage data indicates inoperability of said lamp assembly ballast;

14 said casing defines a plurality of apertures;

15 said means for releasably electrically connecting said test circuit to said lamp assembly

16 ballast includes a wire clip assembly situated in said casing, said wire clip assembly

17 including:

18 a first set of wire receiving clips positioned in accordance with respective

19 casing apertures, each of said first set of wire receiving clips being

20 configured to releasably receive a wire from said lamp system ballast;

21 and

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22 a second set of wire receiving clips spaced from said first set of wire receiving
23 clips and positioned in accordance with said respective casing apertures,
24 each of said second set of wire receiving clips configured to releasably
25 receive a wire from said at least one lamp;
26 a secondary power source electrically connected to said test circuit, said secondary power
27 source energizing said test circuit when said primary power source is disabled;
28 wherein said secondary power source is a capacitor, said capacitor being charged when
29 said primary power source is enabled;
30 means in said test circuit for obtaining lamp voltage test data from said at least one lamp
31 when said secondary power source is enabled and said primary power source is
32 disabled for evaluation indicative of operability of said at least one lamp; and
33 means in said test circuit for storing a lamp fault record in said memory if said evaluated
34 lamp voltage test data indicates inoperability of said at least one lamp.

1 2. (original) The ballast testing and monitoring apparatus as in claim 1 further
2 comprising:

3 means in said test circuit for obtaining operation voltage data from said lamp assembly
4 ballast at a time after obtaining said startup voltage data for evaluation indicative of
5 operability of said lamp assembly ballast; and
6 means in said test circuit for storing another ballast fault record in said memory if said
7 evaluated operation voltage data indicates inoperability of said lamp system ballast.

1 3. (canceled)

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1 4. The ballast testing and monitoring apparatus as in claim 1 wherein said means
2 for releasably electrically connecting said test circuit to the lamp assembly ballast includes a plug
3 and socket connector.

1 5. (canceled)

1 6. (canceled)

1 7. (canceled)

1 8. (currently amended) The ballast testing and monitoring apparatus as in ~~claim 7~~
2 claim 1 further comprising:

3 means in said test circuit for energizing one of said plurality of light source if said ballast
4 fault record is stored in said memory; and
5 means in said test circuit for energizing another of said plurality of light sources if said
6 lamp fault record is stored in said memory.

1 9. The ballast testing and monitoring apparatus as in claim 1 further comprising
2 means in said test circuit for energizing one of said plurality of light sources if said ballast fault
3 record is stored in said memory.

1 Claims 10-17 (canceled)

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1 18. (original) A ballast testing and monitoring apparatus for quick connection to a
2 fluorescent lamp assembly having a lamp system ballast and at least one fluorescent lamp, said
3 apparatus comprising:

4 a casing;

5 a test circuit positioned in said casing;

6 a memory electrically connected to said test circuit;

7 means for releasably electrically connecting said test circuit to a primary power source;

8 a wire clip assembly situated in said casing and having a plurality of wire receiving clips
9 for releasably receiving wires from said lamp assembly ballast and said at least one

10 lamp, said wire receiving clips electrically connecting said wires;

11 a plurality of wire release buttons coupled to respective wire receiving clips, each wire
12 release button including a color indicia corresponding to a color of a respective wire;

13 and

14 means in said test circuit for obtaining voltage data from said lamp assembly ballast for
15 evaluation indicative of operability of said lamp assembly ballast.

1 19. (original) The ballast testing and monitoring apparatus as in claim 18 further
2 comprising a secondary power source electrically connected to said test circuit, said secondary
3 power source energizing said test circuit when said primary power source is disabled.

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1 20. (original) The ballast testing and monitoring apparatus as in claim 19 further
2 comprising:

3 means in said test circuit for obtaining lamp voltage test data from said at least one lamp
4 when said secondary power source is enabled for evaluation indicative of operability
5 of said at least one lamp; and

6 means in said test circuit for storing a lamp fault record in said memory if said evaluated
7 lamp voltage test data indicates inoperability of said at least one lamp.

21. (newly added) A ballast testing and monitoring apparatus for quick connection to
a fluorescent lamp assembly having a lamp system ballast and at least one fluorescent lamp, said
apparatus comprising:

a casing having a plurality of light sources spaced apart along a top surface thereof;

a test circuit positioned in said casing;

a memory electrically connected to said test circuit;

means for releasably electrically connecting said test circuit to a primary power source;

means for releasably electrically connecting said test circuit to said lamp assembly ballast

and to said at least one lamp;

means in said test circuit for obtaining startup voltage data from said lamp assembly ballast

for evaluation indicative of operability of said lamp assembly ballast;

means in said test circuit for storing a ballast fault record in said memory if said evaluated

startup voltage data indicates inoperability of said lamp assembly ballast;

said casing defines a plurality of apertures;

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said means for releasably electrically connecting said test circuit to said lamp assembly ballast includes a wire clip assembly situated in said casing, said wire clip assembly including:

a first set of wire receiving clips positioned in accordance with respective casing apertures, each of said first set of wire receiving clips being configured to releasably receive a wire from said lamp system ballast;

a second set of wire receiving clips spaced from said first set of wire receiving clips and positioned in accordance with said respective casing apertures, each of said second set of wire receiving clips configured to releasably receive a wire from said at least one lamp;

a plurality of wire release buttons coupled to respective wire release clips, each wire release button including a color indicia corresponding to a color of a respective wire;

a secondary power source electrically connected to said test circuit, said secondary power source energizing said test circuit when said primary power source is disabled;

wherein said secondary power source is a capacitor, said capacitor being charged when said primary power source is enabled;

means in said test circuit for obtaining lamp voltage test data from said at least one lamp when said secondary power source is enabled and said primary power source is disabled for evaluation indicative of operability of said at least one lamp; and

means in said test circuit for storing a lamp fault record in said memory if said evaluated lamp voltage test data indicates inoperability of said at least one lamp.